

IT IS CLAIMED:

1. A pulsed charge applicator useful in inducing an increase in the charge state of a biological molecule, comprising:  
a generally rectangular hollow chamber defined by a front wall and an opposed rear wall enclosing a volume of gas confined therebetween;  
a planar electrode affixed to the exterior of said chamber in contiguous alignment adjacent said rear wall, said electrode including a conductor connected thereto; and  
electrical pulsed charge means connected to said conductor for producing a sequence of electrical charge pulses of an electrical potential relative the ambient charge level sufficient to excite selected ones of the molecules comprising said volume of gas to a higher level of excitation, each said occurrence of energy change producing a discrete electromagnetic pulse.
2. Apparatus according to claim 1, wherein:  
said front and rear walls of said chamber are formed of a translucent material.
3. Apparatus according to claim 2, wherein:  
said chamber is conformed for intimate contact with the skin of a person at the front surface thereof.

4. Apparatus according to claim 3, further comprising:

an insulating handle attached to said chamber and conformed to enclose said conductor therein, whereby the preferred path of electrical discharge between said conductor, said electrode and said tissue is across said chamber.

5. A pulsed charge applicator useful in inducing an increase in the electrical charge state of a biological molecule in human tissue, comprising:

a generally rectangular hollow chamber defined by a transparent front wall and an opposed rear wall enclosing a volume of gas confined therebetween, said chamber being conformed for intimate contact with the tissue of a person at the front surface thereof.

an insulating handle attached to said chamber and conformed to enclose said conductor therein, whereby the preferred path of electrical discharge between said conductor, said electrode and said tissue is across said chamber;

a planar electrode affixed to the exterior of said chamber in contiguous alignment adjacent said rear wall, said electrode including a conductor connected thereto; and

electrical pulsed charge means connected to said conductor for producing a sequence of electrical charge pulses of an electrical potential relative the ambient charge level sufficient to excite selected ones of the molecules comprising said volume of gas to a higher level of excitation, each said occurrence of energy change producing a discrete electromagnetic pulse.

6. Apparatus according to claim 5, wherein:

said gas volume includes molecules of water.

7. Apparatus according to claim 6, wherein:

said gas volume includes molecules of carbon dioxide.

8. Apparatus according to claim 7, wherein:

said pulsed charge means includes voltage doublers.

9. Apparatus for inducing a change in the local electrical charge of living tissue, comprising:

an electrical circuit conformed to produce a sequence of electric charge pulses each of an

electrical potential sufficient to excite a selected gas molecule to a higher level of

excitation and thereby producing an electromagnetic pulse associated therewith;

a generally flat hollow chamber defined by a translucent front wall and an opposed rear

wall enclosing a volume of gas confined therebetween, said gas including said

selected gas molecules; and

a planar electrode affixed to the exterior of said chamber in contiguous alignment adjacent

said rear wall, said electrode including a conductor connected to said electrical

circuit, whereby said electromagnetic pulses produced in said chamber are

communicated into said tissue.

10. Apparatus according to claim 9, further comprising:  
an insulating handle attached to said chamber and conformed to enclose said electrical circuit and conductor therein, whereby the preferred path of electrical discharge between said conductor, said electrode and said tissue is across said chamber;

11. Apparatus according to claim 10, wherein:  
said chamber is conformed for intimate contact with the skin of a person at the front surface thereof.

12. Apparatus according to claim 11, wherein:  
said gas volume includes molecules of water.

13. Apparatus according to claim 12, wherein:  
said gas volume includes molecules of carbon dioxide.

14. Apparatus according to claim 13, wherein:  
said pulsed charge means includes voltage doublers.